REVIEW OF ZHURWAL ANALITICHECKOY KHIMII (Journal of Analytical Chemistry)
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A. P. Vinogradov, Editor

Editorial College: I. P. Alimarin, A. M. Dymov, G. S. Lendsberg, M. B. Neyman, Ya. O. Parnas, V. M. Rodionov, D. I. Ryabchikov (Scientific Secretary), I. V. Tananayev, (Acting Editor), and V. G. Khlopin

Nine of the ten articles in this 62-page issue deal with the analysis of exercise substances, while the tenth describes a method for the determination and identification of organic compounds.

Bibliographies are appended to each, and an announcement of a competition for three classes of Stalin prizes is made on the inside of the back cover.

Medvedeva of the Ural Industrial Institute imeni S. M. Kirov lists the following in their order of solubility, the initial compound being the most soluble: r_2s_3 , r_3s_4 , r_3s_4 , r_3s_5 . This study (page 103) shows, in addition, that osmium, palledium, and gold are completely precipitated with the aid of the sulfides of iridium, rhodium, platinum, and ruthenium when boiled for 10 minutes at pH = 3. The precipitability of these three less soluble precious metals with platinum sulfide is of great practical value.

In another article, "Quantitative Analysis of the Meso-Chlorine in the Acridine Series", A. K. Ruzhentseva and M. Ye. Vinogradova of the All-Union Scientific-Research Chemico-Pharmaceutical Institute imeni Sergey Ordzhonikidze in Moscow suggest a method for the determination of meso-chlorine in substituted acridines by heating them with 20 per cent sulfuric acid and afterwards determining the chlorine according to Volhard's method. This procedure is applicable for the analysis of technical material. The article begins on page 113, has a 10 item bibliography (most Russian), and was submitted Apr. 27, 1947.

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A third work of importance (page 131) in the qualitative determination of specific substances is "Electrometric Ferrocyanide Method for Determining Sugars" by Ye. T. Podlubnaya and P. S. Bukharov of the Central Scientife-Research Laboratory. This method is characterized as quick, simple, and preferable to other ferrocyanide methods as well as the Bertran method. It is sufficiently accurate. Rare reagents are not required.

The other six articles on specific qualitative or quantitative procedures for the analysis of specific compounds are: "Systematic Analysis of Cations by the Polarcgraphic Method. II. Conditions for Determining the Elements of the Arsenic Subgroup" by M. A. Portnov and V. P. Povelkina of the State Order of the Labor Red Banner Institute of Applied Chemistry, page 85; "Determination of Magnesium in Dolomites by Phototurbidimetric Titration" by B. Ye. Reznik and G. P. Fedorova of the Chair of Analytical Chemistry of Dnepropetrovsk State University, page 92; Wariation in the Electroconductivity of Electrolytes according to a Variation in the Internal Registance of Elements" (refers to the detection of the quantities of salts dissolved in natural waters) by N. I. Vorod'yev, page 96, submitted Mar. 28, 1947; "Quantitative Determination of Lead in the Presence of Cations of the Second Analytical Group" by V. P. Shvedov, E. O. Gol'dshteyn, and N. I. Seletkova of Leningrad State Order of Lenin University (the Chair of Radiochemistry and Analytical Chemistry), page 109, submitted Apr. 4, 1947; "A New Method for Determining Wolfrem in Steels with the Aid of beta-Naphthoquinoline" by R. B. Golubtsova of the All-Union Institute of Aviation Materials, page 118, submitted Nov. 2, 1946; and "Simultaneous Determination of Carbon, Hydrogen, and the Heating Capacity of Organic Substances" by S. A. Babushkin and Ye. A. Druyan-Rempel' of the Eastern Scientific-Research Institute of Carbon Chemistry at Sverdlovsk, page 123, submitted May 10, 1947.

In "The Determination of the Molecular Composition and the Structural Elements of Organic Compounds by Combined Light Scattering" (page 75) by Ye. G. Treshchova, P. A. Akishin and V. M. Tatevskiy of

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Moscow State University imeni Lomonosov,

spectra obtained by combined light scattering can be used for the qualitative and quantitative analysis of mixtures of organic compounds in cases where actual separation and identification on the basis of non-optical physical constants presents difficulties. Structural elements of organic compounds can be determined using the methods of molecular spectroscopy developed by these authors. Fourteen references (all of them So Russian work) are given.

In regard to the sontest referred to previously, three awards (one of 15,000 and two of 5,000 rubles) were to comprise the Prise imeni S. V. Lebedev for outstanding scientific work in the field of synthetic rubber; four (two of 20,000 and two of 10,000 rubles) were to make up the Prise imeni D. I. Mendeleyev for original theoretical research and scientific work of great practical value in chemistry and physics; and 10,000 rubles was to be presented as the Prize imeni N. S. Kurnakov for outstanding work in the fields of inorganic chemistry, and physico-chemical analysis and its application.

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